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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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For: SYSTEM AND METHOD FOR COMPUTER ANALYSIS  
OF COMPUTER GENERATED COMMUNICATIONS TO  
PRODUCE INDICATIONS AND WARNING OF  
DANGEROUS BEHAVIOR

Art Unit: 2644

RECEIVED

Examiner: To Be Assigned

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Technology Center 2600

**PETITION TO MAKE SPECIAL PURSUANT TO M.P.E.P. §708.02(XI)**  
**PERTAINING TO INVENTIONS FOR COUNTERING TERRORISM**

Assistant Commissioner  
for Patents  
Washington, D. C. 20231

November 28, 2001

Sir:

It is requested that the above-referenced application be afforded special examination status based upon its application to the detection of terrorism. The Petition fee under 37 C.F.R. §1.17(i) is submitted herewith.

The following information is provided to demonstrate the applicability of the present invention to detecting terrorism.

The present invention has the following attributes:

- (1) Collects and conducts analysis of computer-generated and transmitted communications;
- (2) Uses psychological profiling algorithms to evaluate the psychological state of the author with special emphasis on detection of psychological states associated with the risk of threatening behaviors;
- (3) Uses keyword algorithms to provide information on specific possible behaviors or actions of the author might deem relevant to a threatening psychological state;
- (4) Uses communication characteristic algorithms to assess the psychological state of the author and possible targets of these potential threatening actions or behaviors;
- (5) Identifies changes in the psychological state of an author from a series of computerized communications that indicate a change in the risk of potentially damaging actions;
- (6) Is programmable to draw attention of qualified professionals and authorities to these detected changes in order to more fully evaluate risk potential increasing the ability of authorities to identify at risk individuals from large quantities of potentially monitored computer-generated or transmitted communications thereby reducing the need for human monitoring;

(7) Can be flexibly programmed to generate specific types of alerts or warnings and analysis depending on user requirements, including recommendations for user actions; and

(8) Can provide extensive data for analysis by qualified experts interested in evaluating the author and his or her potential risk.

(9) Examples of the application of the invention to detection of insider sabotage risks are given in the original disclosure. Additional examples related to terrorism scenarios are set forth below:

**Terrorism Application One: Following Up Technical Indicators of Insider Risk**

Computer security officials at U.S. national laboratories have reported that using key word and communication data, they have identified several thousand-email communications between laboratory personnel and individuals located in proscribed locations (e.g. North Korea, China, Iraq, Iran, Libya). However, there are so many of these at-risk communications that security officials must prioritize their investigation resources. The invention allows them to evaluate the psychological state of the authors of these communications to determine any increased possible risk due to disgruntlement, deception, anxiety, depression or other psychological states potentially associated with damaging acts. Similar applications can be utilized among high-risk employment groups to detect changes in psychological states associated with risk. Such groups might include airline and airport employees, workers at critical infrastructure facilities, and important defense workers with access to information important to national security.

***Terrorism Scenario Two: Monitoring At-Risk Individuals for Changes Indicative of Increased Risk***

The invention can also be useful to authorities conducting surveillance of individuals identified at-risk for terrorist activities. Changes in the emotional state or attitudes of these individuals could be associated with the probability of increased or decreased risk of terrorist acts.

For example, the data below generated from system prototype of the invention analyzes the difference between the two sets of letters contained in recent anthrax attacks. The first two columns provide values for the identical letters postmarked September 18th sent to Tom Brokaw and *The New York Post*. The third column provides values for the letter sent to Senator Daschle on October 9th.

<b><i>System Variables</i></b>	<b><u>Brokaw</u></b>	<b><u>NY Post</u></b>	<b><u>Daschle</u></b>
Number of Words	15	15	24
Complete Sentences	0	0	6
Rhetorical Questions	0	0	1
We	0	0	1
Negatives	0	0	1
Feelings	0	0	1
Evaluators	1	1	1
Personal references	0	0	3
Spelling Efforts	1	1	1
Alert Phrases	3	3	6
Target of Communication	Media	Media	Political

The system output is utilized to identify a change in the communications and alert the user to this change. System data can then also be used to characterize the author's psychological state and attitudes across communications. The analysis is

generated by a qualified professional utilizing system output combined with substantive expertise.

### General Findings

#### ***Changes in the Author's Psychological State***

There are a number of indications that between the first and second mailings **the author grew more hostile and frustrated and began to personalize the conflict.** The third note to Senator Daschle contains a greater number of words; it is more hostile, direct and personal. The use of the pronoun or direct reference "you" as in "you can not stop us" and "you will die now," adds a more personal dimension. No personal pronouns were used in the first note and its copy. The author's use of a rhetorical question "are you afraid?" is also interesting. This is one of the most aggressive and personal forms of rhetoric available. It is also somewhat taunting. There are also increases in Alert Phrases between the notes indicating the presence of more direct threats. For example, the statement "you die now" is also a direct escalation from letters one and two which only contain the order to "take penicillin now." The phrase "you can not stop us" further personalizes the struggle placing the author directly into the conflict. The author reveals him or herself as someone who feels victimized or identifies with victims and is attempting to reverse this power dynamic--it's your turn to feel afraid and powerless in the face of unpreventable death.

The third letter also **indicates a new concern with credibility.** The punctuation has been improved with the addition of periods and a question mark

(Complete Sentences). There has also been an additional attempt to demonstrate the author's power by emphasizing the group's ownership of the weapon--a point not made as directly in the first letter.

If the assumptions regarding increased frustration and anger and a greater concern with credibility are accepted --- along with the assumption that the objective of the attack is to cause the fear referred to in the letter, several hypotheses are possible. For example, the author may have been frustrated by the type or amount of public and governmental reaction to the initial attacks. Perhaps the relative lack of publicity or speculation that the attacker was a disgruntled or mentally ill individual such as the Unabomber was frustrating.

The author's **apparent sensitivity to time** adds another related dimension of concern. The reference "this is next" places the anthrax attack not only in relationship to the past 911 acts but also raises the possibility of future efforts. The phrase "take penacilin now" represents an effort to instill fear but also to produce a sign of fear in our future behavior. This sensitivity to time combined with the assumption that note three is a response to a lack of reaction to the initial attacks suggests the presence of a feedback loop with the perpetrator. He attacks, monitors our reactions and judges whether there is a sufficiently satisfying sign of our fear. If it is not, there is a new attack and a new message, both, which may represent a more powerful escalation. A possible implication of the presence of such a feedback loop and its increasing personalization is that the author is seeking an on-going relationship over time. This relationship also appears to be part of a larger story

planned, desired or fantasized by the author. The plot of this story appears to contain elements of revenge and the reversal of the victim perpetrator dynamic. Such psychologically restorative stories are referred to in the terrorism business as "fantasy wars." **The presence of this feedback loop and personalization of the conflict also make it likely that there will be further attacks.**

Another implication of the feedback loop is that the perpetrators appear to **shift their tactics and targets in response to our perceived reactions.** Perhaps our initial reactions led to the shift in targets from media organizations and individuals to political actors and institutions with the addition of a more powerful agent. This also implies that the perpetrator may be influenced by other actions we take, even if they are within a somewhat limited range.

#### Who Wrote the Notes?

Content analysis of the limited available data leads me to speculate that **the author is a foreign national from the developing world, who feels an affiliation with the Bin Laden network** responsible for the 911 attacks. The author is most likely not politically sophisticated such as a cell leader or senior political operative.

Characterization of the author as **foreign** is based on the briefness and simplicity of grammatical structures, misspellings and overwrites that suggest a discomfort with written English. The misspelled reference to penicillin is particularly interesting. This apparent lack of familiarity with the English spelling of the antibiotic indicates that **the author is not directly associated with the scientific, biological or engineering part of the enterprise but rather solely concerned with delivery.**

This suggests a necessary affiliation with one or more other parties with the expertise to carry out the creation and transport of the anthrax weapon. Although penicillin will reportedly work in the treatment of anthrax, in this country the medication is considered out-dated. It is rarely used any longer in the U.S. due to the frequency of resistant infections and is no longer manufactured here. However, penicillin is still widely used, recognized and manufactured in the developing world. This suggests that **the author is not from the U. S.** and has not spent a great deal of time here. The author probably knows enough to safely handle the agent and may be taking penicillin to prevent infection.

Other data suggesting that the author is not politically sophisticated includes the repetitive slogans in all three notes. These are chants that could be shouted in a training camp or public demonstration. They are not the rhetoric of a political or religious ideologue.

The author has attempted to **demonstrate a direct affiliation with the perpetrators of the 911 attacks.** These efforts include the date of the letters despite later postmarks and the phrase "this is next." presumably referring to the 911 attacks. The author's increased sense of identification or affiliation with a larger group with a shared cause is also presented in his or her use of the pronouns "us" and "we" in letter three. If this affiliation is more wish than reality, the author may be attempting to share in or support the perceived power and accomplishments of the 911 perpetrators. But the notes have other elements in common with the past mass destruction operations of the Bin Laden network. There is no effort to take

responsibility for or explain the attack. There is also no effort to use the unparalleled publicity as a political platform. Nor is there is there any particular concern with, or effort to, support the idea of affiliation with the 9I I perpetrators. In this regard, the author doesn't care what we think or believe --- a more confident position than a hanger-on or copycat might take and one consistent with past Bin Laden operations.

In view of the foregoing information affording special status is forthwith requested.

To the extent necessary, Applicants petition for an extension of time under 37 C.F.R. §1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 01-2135 (1063.39266X00) and please credit any excess fees to such Deposit Account.

Respectfully submitted,

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